

Town of Carlisle

MASSACHUSETTS 01741

Office of PLANNING BOARD

MINUTES

December 11, 1978

Present: Zielinski, Raftery, Chaput, Hannaford, Sauer

The Minutes of the November 27, 1978, meeting were accepted as read.

Regarding limited-access subdivision, Bob Zielinski Presented a summary of the questions raised and potential problems discussed at the last meeting. It was suggested that consultation by the developer with police, fire and school transportation company could be made a requirement in the Rules and Regulations for Subdivisions. Bob read a letter from CVP containing the following recommendations: (1) Cul-de-sacs should be no longer than 800 feet long, limiting lots to eight or ten. (2) A 50-foot roadway width. (3) Turnarounds should be 160 feet in diameter with the paved area 100 feet from outer edge to outer edge and a 40-foot diameter island. They also recommended that the frontage requirements for lots on the circumference of a cul-de-sac be reduced to 150 feet along the arc as long as the lot is 250 feet wide 30 feet back from the arc.

Vivian Chaput reported on research she had done at the Lowell office of the MAPC. Her information was very much in line with what we had received from CVP.

It was felt that it was important not to restrict a developer to an unnecessary degree but ask him to show how his plan is the best way to accomplish certain Town requirements. Tom Raftery volunteered to draft a model regulation indicating the type of considerations the Board looks for now and how this could be broadened. It was felt that spelling out certain particulars would not necessarily be restrictive but would put developers on notice as to what the Board considered important so that the developer could do his homework.

Mr. Coulter, Virginia Farme, returned to report on further discussions he had had with Acton--in particular how Acton came to choose the length of its limitation for a single-access road. The story was that during a house fire at the beginning of a road which was the only access to 80 homes, someone deeper into the subdivision needed an ambulance. Because of topography and snow banks, the fire equipment blocked the road, delaying the ambulance for quite a while. Acton has since required at least two accesses to all developments.

In discussion of the Procedural Rules for Driveway Permits, it was pointed out that the Zoning Bylaws are now separate and no longer referred to as Article 6. Frank Hannaford was asked if the \$25 fee is adequate to cover expenses and if it would be enough to cover secretarial costs for the work he and Bob are now doing. Frank will block out some figures to see if the fee should be changed. He also suggested that the Minutes of the Public Hearing be reproduced separately for ease in recording. The forms will need some modification. Further discussion and possible approval of the Procedural Rules will be placed on the agenda for the next meeting.

Charles Brown, one of the four people comprising Munroe Hill Associates, presented a new preliminary plan for the proposed subdivision of land behind Virginia Farme. Engineer's name, bike/footpaths, waterholes, rock outcroppings, drainage easements were shown. Brown also presented a letter from his engineer, Ralph Nelson. He reported that no cellar holes had been discovered on the land. The private access shown off Westford Road is proposed at this time to be for construction vehicles. The only proposed roadway is "Drummer Way" from Virginia Farme. Legal access from Westford Road in two places had been explored and it was not available to the developers. The same was true with access from Rockland Road. The private access from Westford Road is 40 feet wide. An abuttor had offered to sell a 10-foot wide strip to bring it up to an acceptable width for a subdivision road. Brown said the offer was accepted but then the price was raised. There have been no further negotiations. He said that Old Morse Road had also been considered, but development of that land seems unlikely.

CPV will be asked to study the plan and meet with the Board on January 8. It is hoped that Mr. Nelson will also be able to attend.

Regarding Drummer Way, Brown indicated that an additional 10 feet will be taken from the Blizzard lot which they own to bring that way up to town standards for width. The necessary slope easements will also be provided from this lot. In answer to a question from Frank Hannaford, he responded affirmatively that required grading can be achieved on the road.

The Indian Hill Stub once again appeared on the Planning Board agenda. The Horrocks' land at the end of the stub has legal frontage on an approved way which was never paved. Horrocks is willing to put in a private driveway but would have to do so over town-accepted land. A letter from Town Counsel recommended the signing of a recordable instrument

whereby Horrocks will hold the town harmless from liability and agree to maintain the driveway and the town would consent to Horrocks' construction of the driveway. There was also a suggestion that a common driveway permit could be sought for the driveway to be build over land to which the town has an easement.

Jack Carpenter reported that the abutters are being obstructive. While they do not want a town road over this stub, neither do they want a private driveway constructed over a portion of their driveway which is also in the town-accepted roadway. There are legal means for the Horrocks to require the town to build a roadway since the way was accepted at Town Meeting; however, litigation is looked upon by all as a last resort. The Board's position was unchanged from its letter a year ago. A final suggestion was that the Town build a road that looks like a driveway at the Horrock's expense.

The requested budget for fiscal year 1980 will be the same as for the current year. Although expenses this year have been below estimates, a new subdivision (Munroe Hills) with 38 lots at \$80 to \$100 per lot will increase the requirement for available funds. A motion to this effect was made, seconded and unanimously voted.


Regarding cul-de-sacs, Hal Sauer reported that review of Dover's rules and regulations revealed that no deadend streets are allowed in that town except under special conditions.

The 8 1/2 x 11 plan of the Spidle lots had not been received. Although it was felt that this requirement was not an absolute necessity, the decision on this Common Driveway Permit was deferred to the next meeting.

The next meeting of the Board will be held on January 8, 1979.

Meeting adjourned at 11 p.m.

Respectfully submitted,


Meredith DeLong
Secretary to the Board

attach to Minutes

From Vision Chapter
12/11/28

(f) Cul-de-Sac and Loop Streets

Cul-de-sacs (or culs-de-sac if the French spelling is followed) are dead-end streets with a turn-around at the end provided for cars. Cul-de-sacs are the best street types to use in single-family development because of the privacy and freedom from traffic noises offered to the houses so served. On this point, David D. Bohannon of San Mateo, California, says: "These are the most desirable locations in the entire subdivision. We get a premium price for cul-de-sac lots for the obvious reason that they provide the house sites most desired by our customers." He continues to say: "Many cities in California are trying to discourage subdividers from planning developments with cul-de-sac streets—apparently because the postman and some other delivery men and the fire department don't like to double back."

Cul-de-sac streets of up to 1,000 or 1,200 feet in length are satisfactory. A cul-de-sac can be used to good advantage, to pick up groups of lots in odd corners of a subdivision, in a portion of otherwise excessively deep blocks, or where topography and natural features make other street patterns difficult for proper development of the property. Any more than 20 single-family houses served by a cul-de-sac lengthens the back-and-forth travel and induces motorists to pull into a private driveway instead of waiting to reach the turn-around at the street end.²⁰⁰ Pave the entire turn-around circle or feature a planted space in the center. If this plot is properly installed with curbing and provided with a suitable, easily maintained feature, it offers an excellent opportunity to enhance the attractiveness of the cul-de-sac street.

Sometimes official bodies object to cul-de-sacs because they do not appreciate that problems of sewerage and drainage, water mains, and refuse collection can be readily solved by proper layout. Objections can be overcome when the minimum standard for the turn-around diameter is 100 feet from outer curb to outer curb. The fire department can then maneuver readily. Dead-end water mains can be eliminated if the main is placed in a property line easement at the rear of the property lines instead of in the street; or if two cul-de-sacs are paired, water mains can serve both streets when looped by means of cross-property easements.

The use of the Y or T "back-around" can be used to advantage on short cul-de-sacs where a few lots are served. For slopes between 8 and 15 percent these are excellent solutions. Excessive grading to provide for a turn-around circle can thus be avoided.²⁰¹ In higher density cluster arrangements or where apartments are involved having several hundred dwelling units, the cul-de-sac will have capacity limitations unless modified treatment is provided such as a divided type of roadway with a median strip of 10 to 30 feet in width.

Loop streets can be used to good advantage. They also contribute to privacy and discourage through traffic. Loop streets, like cul-de-sacs, as mentioned earlier

²⁰⁰ The maximum of 20 single-family units is mentioned because of the number of daily weekday trips per dwelling unit that are generated as traffic movement in a single-family area—between six to 10. Seven is a reasonable average.

²⁰¹ The 100-foot right-of-way diameter for cul-de-sac treatment will allow 30-foot outside turning radius for passenger cars and a 40-foot curb radius for the short delivery truck and smaller fire apparatus. Curb parking can be eliminated by placing parking on the abutting lots. The pie-shaped lots and short distances between entrance driveways also preclude curb parking. Where street parking is designed for, the cul-de-sac curb radius must be 50 feet.

from The Community Builders Handbook by
Urban Land Institute, 1968

can be used to pick up groups of lots in odd corners of the property, in the center of excessively deep blocks, or where topography or natural features make a conventional street pattern difficult. A skilled land planner will not limit himself to a fixed pattern or stereotyped repetition of curvilinear street or block treatment.

In single-family areas where an open character is desired and where there are few houses to be served, curbs and gutters are not necessarily needed on cul-de-sac streets. An inverted crown or dished roadway can be used, thus doing away with the need for curbs and side gutters. Because water flows to the storm sewer by way of the center of the road, the number of catch basins is reduced by half.

Each development is a separate problem requiring not only adjusting the plan to the topography but recognizing local customs and market preferences.

(g) Alleys

Alleys in present-day planning and development for residential uses are not desirable or necessary. A rear property line easement is preferred to an alley where needed for power lines or sewer rights-of-way.

The alley for access to garages in rear yards and as a right-of-way for rear service has been eliminated in the planning and development of new neighborhoods. Return to an alley form of platting is a retrogression to the outmoded scheme of the gridiron street and block pattern. Alleys require more land, more pavement to install and maintain, more police patrol and extra street lighting, thus adding burdens to municipal costs.

It is true that in certain sections of the mid-west, where land is flat, subdivision regulations in some communities still call for alleys. But with the trend to underground utilities, access and servicing need not take place in alleys.

The trend to clustered designs, the increased use of underground power lines, varied housing types within a planned unit development, the common areas and interior block parks, plus attempts to separate pedestrians and vehicles, mean the alley's role is eliminated.

In multi-family developments, alleys or rear service drives may offer advantages for refuse collection or to provide access to off-street parking facilities and for fire protection.

In older type commercial areas of unplanned nature, rear access may be necessary for loading and unloading purposes. *If provided*, alleys should be 20 feet wide, paved for the full width, and restricted against use for parking. Alleys should enter streets at right angles. Dead-end alleys are never desirable, but if they do occur turn-around space is required.

(h) Intersections

Curb radii of 15 feet at intersections of two minor streets are satisfactory, rather than longer radii which permit high automobile speeds in turning corners, thereby endangering pedestrians. The amount of street paving is also reduced with resultant savings in paving costs. Acute angle street intersections of any angle less than 75 degrees should be avoided. They create excessive roadway paving, are traffic hazards, and create block shapes that are difficult and uneconomical to lot. It is best for all intersections to meet at approximately 90 degree angles. It is also important to design and maintain clear sight distance at intersections.